

REMARKS

Claims 9-12, 18-20, 29, and 35-42 are pending in this application. Claims 9, 20, 29, and 35 are amended herein to more distinctly claim and clarify the subject matter of the present invention. Claims 14-17, and 30-31 are canceled by this response. New claims 43 and 44 are added to further distinctly claim the subject matter of the present invention. Applicant submits that no new matter has been added by this response.

Claims 9-12 and 14-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by WCDMA (WCDMA for UMTS: Radio Access for Third Generation Mobile Communications) (hereinafter as WCDMA). Claims 35-40 and 42 were rejected under 35 U.S.C. § 102(b) as being anticipated by WCDMA (WCDMA for UMTS: Radio Access for Third Generation Mobile Communications) in conjunction with 3GPP (3GPP TS 25.322 V4.4.0 (2002-03)) (hereinafter as WCDMA/UMTS/3GPP). Claims 29-31 were rejected under 35 U.S.C. § 103(a) as being unpatenable over CarTalk (Communication Architecture Deliverable D6) in view of Publication US 2003/0211846 by Nagpal et al. (hereinafter Nagpal). Claim 41 was rejected under 35 U.S.C. § 103(a) as being unpatenable over WCDMA/UMTS/3GPP in view of AMR1 (3GPP TS 25.415 V3.7.0 (2001-06)) (hereinafter ARM1) in further view of AMR2 (3GPP TS 26.071 V4.0.0 (2001-03)) (hereinafter ARM2).

Applicant respectfully traverses these rejections, and requests reconsideration and allowance of the pending claims in view of the following arguments.

PRIORITY

Applicant notes with appreciation the Examiner's acknowledgement and acceptance of the priority documents filed May 24, 2007.

RESPONSE TO ARGUMENTS

Applicant respectfully submits this Final Office Action response to further explain the distinctions of the present invention over the cited art.

Claim Objections

Claim 16 is canceled by this response, and the objection is therefore moot.

Rejections under 35 U.S.C. § 102

Claims 9-12 and 14-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by WCDMA. Claims 14-17 are canceled by this response, and the rejection is therefore moot with regard to claims 14-17.

Claim 9 is directed to a method of processing data in a receiver apparatus used in a wireless communication system, the receiver apparatus comprising a medium access control (MAC) layer and a radio link control (RLC) layer for processing data units, and the method includes "processing the data unit in accordance with one of a first manner and a second manner, the selection of one of the first manner and the second manner based upon at least an operation mode, wherein the second manner comprises checking whether a delivery of the data unit having the error has been configured and either delivering the data unit to an upper layer if the delivery of the data

unit is configured or discarding the data unit if the delivery of the data unit is not configured.” Applicant respectfully submits that WCDMA does not disclose the identified features of claim 9.

The WCDMA reference relates to general concepts of radio interface protocols for universal mobile telecommunication system (UMTS). On page 5 of the Office action, the Examiner indicates WCDMA pages 123-124 as disclosing “checking whether an error handling scheme has been provided.” Applicant’s review of portions of WCDMA which relate to the “error handling” aspect reveals the following passages:

“In transparent mode no protocol overhead is added to higher layer data. Erroneous protocol data units (PDUs) can be discarded or marked erroneous.” (See page 123, lines 7-8 under 7.4.1 RLC Layer Architecture).

“In unacknowledged mode no retransmission protocol is in use and data delivery is not guaranteed. Received erroneous data is either marked or discarded depending on the configuration.” (See page 124, lines 5-7).

“In the acknowledge mode an automatic repeat request (ARQ)mechanism is used for error correction. . . . In case RLC is unable to deliver the data correctly (max number of retransmissions reached or the transmission time exceeded), the upper layer is notified and the RLC SDU is discarded in AM mode”. (See page 124, lines 5-7).

Applicant assumes *arguendo* that the first, second and third passages can be interpreted as relating to “error handling,” as indicated in the Office Action, and required by claim 9. Even if this were correct, WCDMA is deficient as an anticipating reference for at least two reasons.

First of all, in the first passage, the WCDMA merely states that “erroneous PDUs can be discarded or marked erroneous” in the transparent mode. The second passage also states, received erroneous data is either marked or discarded.” However, it is unclear as to when such erroneous PDUs are discarded, and when and how such

erroneous PDUs are “marked”. Also, the definition of “marked” is neither clear nor easily understood by those skilled in the art.

In contrast, Applicant’s claimed invention recites the feature of “wherein the second manner comprises checking whether a delivery of the data unit having the error has been configured and either delivering the data unit to an upper layer if the delivery of the data unit is configured or discarding the data unit if the delivery of the data unit is not configured”. Namely, the second manner comprises either delivering the data unit to the upper layer or discarding the data unit based upon a determination of whether the delivery of the RLC data unit having the error has been configured. Therefore, WCDMA fails to teach and/or suggest any details indicating specifically when and how to implement the broad concepts of merely discarding or “marking” erroneous PDUs.

Secondly, the method employed in WCDMA is technically different than that of claim 9. In clear contrast, Applicant’s claimed invention (as amended) provides specific details as to when and how erroneous data units are to be handled by the RLC layer entity. Namely, WCDMA fails to teach or suggest the feature of “second manner comprises either delivering the data unit to the upper layer,” nor does WCDMA teach or suggest discarding the data unit based upon a determination of whether the delivery of the data unit having the error has been configured.

In view of the foregoing, WCDMA fails to teach or suggest all of the features recited in independent claim 9, and therefore this claim is believed to be allowable. Dependent claims 10-12, 18, and 19 are also believed to allowable at least by virtue of their dependence on the allowable independent claim 9.

With respect to independent claim 20, the claim has been amended, similarly to the amendments of claim 9, to more distinctly claim the subject matter. Amended claim 20 recites, in part, “wherein the second manner comprises checking whether a delivery of the data unit having the error has been configured and either delivering the data unit to an upper layer if the delivery of the data unit is configured or discarding the data unit if the delivery of the data unit is not configured.”

On page 8 of the Office Action, the Examiner indicates WCDMA, pages 123-124 as disclosing “checking whether an error handling scheme has been provided,” as recited in claim 20. For reasons similar to the arguments for claim 9, in regards to “error handling” and “when and how” to implement the broad concepts of merely discarding or “marking” erroneous PDUs, Applicant submits that independent claim 20 is also allowable.

Claims 35-40 and 42 were rejected under 35 U.S.C. § 102(b) as being anticipated by WCDMA in conjunction with 3GPP (3GPP TS 25.322 V4.4.0 (2002-03)) (hereinafter as WCDMA/UMTS/3GPP).

Independent claim 35, the claim has been amended to recite in part, a method of processing data by a radio link control (RLC) entity, and the method includes “wherein the first manner is performed when the RLC entity is in non-transparent mode, such that the RLC data unit is discarded,” and “wherein the second manner is performed when the RLC entity is in transparent mode, and comprises determining whether a delivery of the RLC data unit having the CRC error has been configured, such that the RLC data unit is either further processed or discarded based on the determining step.”

WCDMA fails to disclose or suggest any details indicating specifically when and how to implement the broad concepts of merely discarding or “marking” erroneous PDUs, as disclosed in WCDMA at pages 123-124. Specifically, WCDMA fails to disclose or suggest the second manner comprises the RLC data unit is either further processed or discarded based on the determining step. Therefore, it is believed that independent claim 35 is allowable over WCDMA.

The 3GPP reference relates to a Radio Link Control (RLC) protocol specification. Although 3GPP discloses a manner of handling data units by checking for a “no”, “yes”, and “no detect” in order to determine how to process the data unit, such handling manner can not be equated to the features of claims 35-40, and 42. In fact, if the “delivery of erroneous SDUs” of 3GPP is always configured, then the data unit is processed based on the result (i.e., yes, no, no detect) of the configuration. In contrast, the invention of claims 35-40 and 42 first determines whether a delivery of the data unit having the error has been configured or not, then selectively processing (“delivering” or “discarding”) the data unit based on such determination (i.e. configured or not-configured).

Therefore, 3GPP does not overcome the deficiencies of WCDMA explained above. Applicant respectfully submits, independent claim 35 is allowable, and dependent claims 36-40 and 42 are allowable at least by virtue of their dependence on independent claim 35.

Accordingly, Applicant requests that the rejections under 35 U.S.C. § 102(b) be withdrawn and the claims put in a condition of allowance.

Rejections under 35 U.S.C. § 103

Claims 29-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over CarTalk in view of Nagpal. Applicant notes that claims 30 and 31 are canceled by this response and claims 32-34 were previously canceled.

Independent claim 29, as amended, teaches a method of processing data in a receiver apparatus used in a wireless communication system, the receiver apparatus comprising a physical layer and a medium access control (MAC) layer for processing data units, and the method includes “checking whether a delivery of the data unit having the error has been configured, and either delivering the data unit to an upper layer when the delivery of the data unit is configured or discarding the data unit when the delivery of the data unit is not configured, if the header information is not present.”

The Examiner asserts on page 13 of the Office Action, that CarTalk teaches some of the limitations of claim 29, but fails to teach the limitation “examining the data unit for presence of header information associated with a MAC header . . .” However, the Examiner relies on Nagpal to cure the deficiencies of CarTalk.

Applicant assumes *arguendo* that an error notification is interpreted as an error scheme, as indicated on page 13 of the Office Action, and as required by claim 29. Even if that were correct, CarTalk is deficient because it fails to teach or suggest the specific details of “checking whether a delivery of the data unit having the error has been configured and either delivering the data unit to an upper layer if the delivery of the data unit is configured or discarding the data unit if the delivery of the data unit is not configured”. Furthermore, CarTalk fails to teach and/or suggest any details indicating

specifically when and how to implement the broad concepts of merely providing an error notification.

Applicant submits that Nagpal fails to cure the previously identified deficiencies of CarTalk, therefore claim 29 is allowable over CarTalk in view of Nagpal. Even if one skilled in the art were to combine the references as asserted, claim 29 would still be allowable.

Claim 41 was rejected under 35 U.S.C. § 103(a) as being unpatenable over 3GPP in view of AMR1 and in further view of AMR2.

Applicant respectfully submits that with respect to independent claim 35, 3GPP does not overcome the deficiencies of WCDMA, as asserted above. It is that further submitted that neither AMR1 nor AMR2 cure the deficiencies of WCDMA and 3GPP with regard to the details indicating when and how to implement the broad concepts of merely discarding or marking erroneous PDUs. Therefore, claim 41 is believed to be allowable at least by virtue of its dependence on allowable independent claim 35. Thus, even if the references are combined as asserted, the invention of claim 41 would be allowable.

Applicant request that the rejections under 35 U.S.C. § 103(a) be withdrawn.

New claims 43 and 44 have been added herein to distinctly claim the present invention. Applicant submits the new claims recite limitations that further clarify the present invention and are allowable over the cited references by virtue of their dependence from allowable independent claims 9 and 20. Applicant request that claims 43 and 44 be put in a condition of allowance.

Conclusion

In view of the foregoing, it is respectfully submitted that the application and the claims are in condition for reconsideration on the merits, thus reexamination of the application is requested. The Examiner is invited to call the undersigned attorney at (213) 623-2221 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

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